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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,983	08/30/2001	Paul A. Farrar	1303.018US1	1908
21186	7590	09/09/2004	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			RACHUBA, MAURINA T	
			ART UNIT	PAPER NUMBER
			3723	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/944,983	Applicant(s) FARRAR, PAUL A. an	
	Examiner M Rachuba	Art Unit 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 14-21 and 24-92 is/are pending in the application.
- 4a) Of the above claim(s) 3, 17, 28, 37, 40, 58, 67, 68, 76, 81 and 89 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-10, 14-16, 18-21, 24-27, 29-36, 38, 39, 41-57, 59-66, 69-75, 77-80, 82-88 and 90-92 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10 June 2004 has been entered.

Election/Restrictions

2. Claims 3, 17, 28, 37, 40, 58, 67, 68, 76, 81, and 89 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 4.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 6, 51, 55 and 77 are finally rejected under 35 U.S.C. 102(b) as being clearly anticipated by Dion et al, 3,943,666, as set forth in the previous Office action mailed 20 April 2004.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 4-9, 14, 16, 18-21, 24, 25, 33, 35, 36, 38, 39, 41-56, 59-61, 63-66, 69-75, 77-80, 82-88 and 90-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu, 5,827,115 in view of Dion et al '666, as set forth in the previous Office action mailed 20 April 2004. Further, '115 discloses that the length of the polishing pad drum spans across the wafer to polish the wafer in one pass, but not that the wafer moves with respect to the drum in the direction of the tangential force to throw debris in a direction toward a previously processed portion of the wafer. '666, figure 1, clearly teaches rotating a wafer and polishing drum in directions of tangential force to throw debris in a direction toward a previously processed portion of the wafer. It would have been obvious to one of ordinary skill to have provided '115 with the rotational direction taught by '666, figure 1, to prevent debris from damaging an untreated area of the wafer during contact between the wafer and drum.

7. Claims 10, 15, 26-27, 29-32, 34 and 62 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu, '115 in view of Dion et al, '666 and further in view of Bruxvoort et al, 5,958,794, as set forth in the previous Office action mailed 20 April 2004. Further, '115 discloses that the length of the polishing pad drum spans

across the wafer to polish the wafer in one pass, but not that the wafer moves with respect to the drum in the direction of the tangential force to throw debris in a direction toward a previously processed portion of the wafer. '666, figure 1, clearly teaches rotating a wafer and polishing drum in directions of tangential force to throw debris in a direction toward a previously processed portion of the wafer. It would have been obvious to one of ordinary skill to have provided '115 with the rotational direction taught by '666, figure 1, to prevent debris from damaging an untreated area of the wafer during contact between the wafer and drum.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M Rachuba whose telephone number is 703-308-1361. The examiner can normally be reached on Monday-Thursday from 8:30 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail, can be reached on (703) 308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Rachuba
Primary Patent Examiner

